

undercurrent

THE PRIVATE, EXCLUSIVE GUIDE FOR SERIOUS DIVERS

November, 1975

P.O. Box 1658, Sausalito, California 94965

Cable Address: Gooddiving

Puerto Vallarta, Mexico:

Outfoxing runs, rains and hurricanes

The trip was set. I would leave soon to review a well-publicized Caribbean resort about which we've heard some not-too-positive reports. I called my travel agent to check the arrangements. "Yes, everything's fine," he said.

"What about the weather? I asked. "Any problems?"

"Well, I was about to ask you that. You know those islands are on the fringes of a hurricane. Is this one of your regular trips or are you doing a magazine ad about how you and a beautiful lady survived the hurricane at 100 feet and made it back to the small hotel for a pop of Canadian Club on the rocks?"

"Certainly I know about the hurricane," I lied, "but it should be out of there before I arrive, shouldn't it?" A hurricane! I hadn't considered that problem, but come to think of it this was hurricane season.

"It should be gone," my agent replied, "but we called the weather bureau and it looks like there's another one on its tail, though it's too early to tell."

"Thanks," I said. "I'll think this over." With the Undercurrent deadline rapidly approaching I could not wait long. I had to find an alternative, one with hotel vacancies and a seat on the plane. It would not be easy.

I wonder how many divers have planned an exciting vacation to a new dive spot, taken time away from their employment when best they could, packed up the family or even persuaded another diver or two to join in, and then arrived in the tropical haven for a week of rain, storms and murky water. Getting specific weather information on dive areas is not easy. For the alternative trip I had to be right on target. I was not about to spend \$1000 to sip rum and soda throughout a tropical rain-storm and write a fictitious travel review.

Weather trends exist and it's wise to observe them. Before departing check with your local weather bureau about impending storms. Consider calling the hotel at which you have reservations and ask about the weather. Or call the dive shop and ask about the weather and visibility. If it looks horrid, why venture

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on? You might lose a night's hotel deposit, but you won't lose ten days of diving. Search out an alternative dive spot, check the weather, and put your travel agent to work. And, save yourself future headaches--remember these trends.

Trinidad/Tobago: From June to December it's 6-7" of rain per month, but the rest of the year rainfall is less than 2" a month.

Cozumel: May to November is called "The Season of the Storms," although September is often quite dry. February, March and April are fine months.

Bahamas: May through November is generally "the rainy season." Depending upon the island, rain averages between 5-9" a month, although there is still plenty of sunshine. In July, August and September don't be surprised about hurricanes. The rest of the year rainfall averages only 1-2".

U.S. Virgins: Rainfall statistics look similar to the Bahamas, but there are fewer storms. Rains tend to be brief. September and October are the worst.

Bonaire: Rainfall is very low compared to other dive spots--less than 2" a month. October through January frequency of showers increases just a bit.

Key West, Florida: Thunderstorms hit on a third of the days from June to September, but average only one a month from November to April.

Puerto Vallarta, Mexico: Up to 14" of rain falls in July through September, but rapidly tapers to a 2" average from November to May.

Hawaiian Islands: Year-round rainfall is very low although from mid-December to mid-February there may be one or two storms lasting several days. Bad weather can often be beaten in a single morning by flying to another island (only \$10) if you can find an empty seat and a hotel vacancy.

For the serious diver the search for good weather is not so much a search for clear skies as it is a search for high visibility. At home, most of us have to be satisfied with 20 foot visibility on our weekend dives. So when we read advertisements saying "I looked up at the surface from 100 feet below and saw the clouds in the sky" our bodies tingle with excitement. Only to the marine biologist, to the microphotographer and to the shell collector is low visibility not a curse. But high visibility is always a blessing.

Visibility is a function of the amount of light entering the water (which explains why visibility is lower on overcast days) and the number of suspended particles in the water. Low visibility (turbidity) has a number of causes:

1. rain, which washes sand from beaches or brings muddy rivers.
2. wind, which can churn up shores and shallow bottoms.
3. waves, which stir up shallow bottoms and sandy shores.
4. plankton, either animal (zooplankton) or plant (phytoplankton).
5. pollution, either organic or inorganic
6. underwater sandfalls or turbidity currents
7. miscellaneous, such as volcanic ash or fish kills,

Blueness and clarity of water tends to suggest scarcity of minute life.

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Caribbean water is very low in fertility; most fish receive their nutrition from the life created within the coral reefs. Water on both American coasts is highly fertile and filled with plankton. Most Mexican coastal water falls somewhere in between.

Armed with this information I surveyed potential destinations and finally selected Puerto Vallarta, 400 miles to the north of Acapulco. It was accessible on such short notice, there were no storms at sea, and the little information I could muster suggested it might be a diving find. Because it had been immortalized by The Night of the Iguana, Americans have quickly developed a colony of vacation and retirement homes. Luxury hotels, however tasteful, have sprouted up to meet the rush of tourists. While Acapulco is dotted with gauche American ventures (e.g., Colonel Sanders), Puerto Vallarta seems surprisingly unspoiled. It's changing rapidly, but much of old Mexico remains. Except the prices. They're right up there.

As we flew down the coast the ocean increased in blueness. Once we passed the Sea of Cortez a murky green dominated the coastal waters. The color did not change as we eased into the Puerto Vallarta airport.

Camino Real Hotel and Dive Shop (Playa Las Estacas, P.V.; telephone 2-00-02)..... Because of the paucity of dive shops in Puerto Vallarta, I broke my normal rule of not diving with hotel dive guides and signed up for the next morning dive. I was told the charge would be \$32 for a two tank dive. Enrique, the guide, said to arrive at 10 a.m. I suggested 8 a.m. He agreed. Upon telling the price to my buddy, I received a fair dose of outrage. She marched to the dive shop and returned to tell me that the price was now \$25 each.

One reason not to dive at 8 a.m. is that the morning overcast doesn't burn off until 10 or 11. But since Enrique hadn't told us, we loaded our gear into the dugout canoe beached in front of the hotel and were paddled to the 18 foot dive boat anchored a short ways out. After we completed our transfer, Enrique asked if we would give a dollar to the fellow who had rowed us. You can imagine our answer.

Our destination was Los Arcos, three rocks nearly 100 feet high that have been beautifully arched by waves and wind. Enrique had not brought tanks for himself, but announced that he would keep track of our bubbles from the boat. As we donned our gear the water momentarily boiled thirty feet away. My buddy's eyes stretched wide. Although my exterior remained calm, my heart flapped like a speared fish. "Now what the hell was that? I exclaimed. "Only a manta ray," our redoubtable guide replied. We jumped in.

In the 35 foot water, visibility averaged about 30 feet, which I found disappointing because we could not locate the large rays which inhabit the area. We saw only one three footer and one 6 footer on another day. But the fish were plentiful and each species seemed larger than I've grown accustomed to. Schools of large surgeon fish seemed unafraid; pompanos, jacks and snappers scooted by. Large filefish and angel fish appeared behind every rock and we observed a fascinating array of blennies and other tiny fish. I was impressed with the shelling and found at least a half-dozen nice-sized murexes without searching, but each was alive and I replaced it. I did find a handful of small empty shells, cowries and snails among them. On the trip back an occasional manta would fly from the water, sailing perhaps ten feet high, then crash back into the ocean. Some attribute this to mating behavior, others simply to a form of scratching oneself by the impact. Whatever the cause, it's a startling sight.

Buzos de Vallarta (Paseo Diaz Ordaz 108; telephone 2-18-95)..... This is the main dive shop. Their gear seems to be in fairly good shape, but their regulators have no gauges. Their location is best described as being next to

Carlos O'Briens, a tourist joint which is a must. When ordering a bottle of fine Mexican beer, you receive two 7 oz. bottles packed in ice and delivered in a small galvanized bucket. For 70¢. It's the hot spot for eating and drinking.

I've digressed from describing the dive shop, perhaps because I was more impressed by O'Briens. The divemaster, Roberto, who speaks acceptable English, took us on a one tank dive for \$12 per person. His boat left from downtown, but stopped at hotel beaches to pick up other divers. Three who joined us from the luxury hotel Garza Blanca (a fine place to stay) had paid \$20 for their single tank dive. Again we journeyed to Los Arcos, just about the only area readily accessible for half day trips by P.V.'s slow boats. We dove to 75 feet in a slightly different spot than the previous day. Visibility had dropped to 20 feet, blotting out the colors and leaving a drab landscape. Fish were abundant and we enjoyed a brief chase of a 3 foot octopus. Two uncertified divers on board were accompanied part time by Roberto, but they were indeed on their own. And so were we. We did not see him throughout the dive.

I planned to dive with Roberto at the Islas Marietas on my last day in town. At these islands I was promised high visibility and abundant fish. At the last moment I resigned from the trip, having contracted that not-so-rare affliction labeled Montezuma's Revenge. It seems to reach near-epidemic stages in P.V., proof of which can be found in the hotel notion shops which keep Kaopectate on the same shelf as suntan lotion. That evening I spoke with Americans who had taken the trip. They found plenty of fish, but the visibility had been less than 10 feet. The eight hour, \$30 trip left them tired and disappointed.

Pedro Rodriguez (Mismaloya Beach)... Pedro is located 5 minutes from Los Arcos and is close to a few other dive spots as well. For me he selected a small reef 30 minutes away. The terrain, visibility and life were similar to other spots, but Pedro rates a notch above other guides in interest and concern. He's willing to look for other spots, also. He has no phone, but is in his shop from 9-4 daily. In good English he said his charge for two tanks is \$24, but for me it would be \$20. I agreed, even though the rule in P.V. is never to pay the asking price except in restaurants, bars, drug stores and gas stations.

A guarded conclusion: Although I had done my weather homework, I could not guarantee good visibility. One cause of the murk was muddy rivers. There were thunderstorms in the mountains. But what about winter visibility? I have read of visibility nearing 100 feet, but local divers told me it never gets much better than 50 feet and with their tendency to exaggerate I must wonder.

There's no question that fish are large and abundant--in the right places. Coral is colorful, but in limited quantities. There may be potential, but you won't find it with the guides unless you make special arrangements. Boats are slow, most guides are disinterested and the shops have inadequate rental gear and little new equipment. Yet the question remains. Is P.V. undeveloped as a dive area because it is unexplored? Perhaps a reader can help. In the meantime an enterprising diver might explore the area and derive his own conclusions. There are prohibitions against foreign business ventures, but the Mexican Consulate can explain legal means for investment. A fast boat and an inquisitive guide just might make out.

Diver's Compass: Don't miss Yelapa, a primitive, isolated fishing village...Moby Dick's has unique seafood, including a combination plate of spiced deviled crab, octopus cooked in its own ink and incredible oysters; \$9 for two people...Auto rentals begin at \$20 a day...bring all the spare equipment you might need, including film...wet suit tops are useful year-round...Mexican banks pay 12.5% to 14.7% interest and no bank has failed in 40 years due to tight government control; for information write Carl C. Ross, Inversiones Alba (Reforma 336), Mexico 6. D.F.Las Margaritas has first rate mariachis and

just as good food...We saw enormous parrotfish, but none to match the beak found on the beach; big enough to crush a coconut! (C.C., 10/5/75)

Undercurrent Survey on Buoyancy Compensators:

Early results reveal three safety tips

Results of the flotation device questionnaire are still being tabulated. Upon completion we will verify the data by reviewing the devices themselves. In the meantime, however, three unique safety problems have come to light.

1. Occasionally the mouthpiece on the oral inflator has popped off under water, rendering the B.C. dangerous because it will take on water and increase the diver's weight, and rendering it useless as a safety device since it no longer holds air. The culprit is usually the plastic hose clamp which holds the mouthpiece in the hose. Before leaving for a dive, check that hose clamp carefully. If it shows any signs of wear or is loose enough to be rotated ever so slightly, replace it. Also replace the clamp if there are any indications that the hose has been pulled out from the mouthpiece. When traveling in foreign countries carry a spare.

2. Many BC's take in water during a dive. It's unavoidable when you use the oral inflator underwater. Leaks from the purge valve can usually be eliminated by removing the valve, cleaning the sand

or dirt out, applying a light coat of silicone, and replacing the valve. Several divers, however, reported that their vests leaked at the seams and water entered between the inner bag and outer bag. If you're stuck with one of these lemons, inflate the vest to its maximum capacity after each dive and let it sit for as long as required for the water to be forced back out at the seams. You're wise to replace such a vest because the leakage is annoying and the extra weight you pack around is of no value to you.

3. In some cases the automatic inflator filled the vest unintentionally. One reason is that buttons have gotten caught between the diver and a hard place, or gotten hung up when the oral/automatic inflator hose has been floating above the diver.

One means for prevention is to stuff the mouthpiece in your vest pocket. A better means is to use velcro, that handy little stick-'em material, to fasten the mouthpiece to your wet suit top, under your arm above your waist, or to your vest. By keeping the inflator fastened to your body, you'll always be able to find it in an emergency.

Homeswapping: *The socially acceptable adventure in diving*

Would you find a way to take a month off work to stay free-of-charge in a four bedroom luxury beach-front home in Haiti? Or a three bedroom cottage an hour from Honolulu? Or a two bedroom ocean front dream house in St. Maarten? Several thousand people a year take advantage of these opportunities and there's only one simple catch.

For you to spend a month in one of these homes, the owners will want to spend a month in your home. By offering your home in exchange for homes in other parts of the world, you may stay in a range of domiciles from beach front villas to mountain retreats, to ski resorts, while your home back home suffices for compensation. Some people exchange for two weeks, others for a month, and some even for several months. And the only cost for accommodations is your food.

Finding these vacation meccas is not a random exercise. Several organizations specialize in locating homeswappers and publicizing their offers. The oldest and largest is the *Vacation Exchange Club* (350 Broadway, New York, N.Y., 10013). They publish an annual directory and a supplement (2500 names in 1975) which include the name of the homeowner, the address, a 20-30 word description of the home offered for exchange and often a picture. For a \$12 annual charge you insert a description of your home

and your preferences for the area with which you hope to exchange. You receive a copy of the directory from which you select an area and a home that interests you. You write the individual home owner listed in the book and if the other party is interested in your home, you work out the details by mail and the exchange is underway.

In their 1975 homeswappers guide there were three offerings in the Bahamas, fourteen in the West Indies, one each in Bermuda and Guam, seven in the Virgin Islands, twenty in Mexico, sixteen in Australia, twenty-two in Hawaii, and more than 100 in Florida. Coldwater diving spots such as Puget Sound (Washington), Monterey (California) and eastern seaboard states were well represented. Two examples of tropical homes:

"Jamaica, 2 double bedroom house, 25 acres of tropical grounds, 2 private white sand beaches, one swimming pool, sailing dinghy, jeep, house-boy gardener, swimming, skin-diving, golf, tennis, marlin fishing, water skiing; exchange 2-3 months, anytime; prefer California or Colorado."

"Solomon Islands, Tahiti style house on five acre island bordering remote atoll lagoon, electricity, refrigerator, running water, swimming, boating, shell-ing; will exchange anywhere, time negotiable."

What are your chances of being able to exchange

your home for a Caribbean villa? It depends. It's easiest if you have a somewhat comparable home, but that's not imperative. Location is a more important criterion. Some locations are choice: ski areas, country and mountain homes, and some big cities such as Washington and Los Angeles. There seems to be an increased demand for midwest, rural and farming homes. But, don't be afraid to offer whatever you have. A modest two bedroom home in middle America may be just the ticket for a well travelled English couple who exchange their seaside home in the British Virgins. And by all means don't overlook home exchanges in the states where you won't find diving of the tropical sort but the under-

water experiences will still be unique and exciting. Not all the good diving is in tropical waters, as divers from British Columbia and Washington, Los Angeles, Rhode Island, Long Island and elsewhere are quick to tell you.

Although Vacation Exchange Club is the best known, you may wish to get information from these other homeswapping organizations: *Vacation Home Exchange*, 400 Lake St., Oak Park, Ill. (60302); *Home Exchange Bureau*, P.O. Box 555, Grants, New Mexico (87020); *Homeswappers*, Suite 303E, 200 Park Ave., New York, NY (10017). The deadline for publication in the *Vacation Exchange Club* guide is coming up so write now if you're interested.

Government Regulation of Diving:

The entire diving community has been in a year-long twitter over the Los Angeles County Scuba Diving Ordinance, but that twitter has now subsided to a nervous twitch and a long low whistle of relief. In early September, the L.A. County Board of Supervisors, the publicly elected decision-making body of the county, voted unanimously to water down the tough, new law.

In the year since the law passed, the sleeping diving community awoke from a life-long slumber, flexed its muscles, and performed notably in behind-the-scenes negotiations with the county government. Those items *struck* from the law include the ill-conceived section requiring recertification of divers and instructors; the section establishing performance standards for regulators, valves, tanks, pressure gauges, weight belts and flotation devices; the section establishing standards for compressed air; the requirement that dive boats keep a roster of divers aboard and that they turn over the gear of injured or deceased divers only to a peace officer; and the prohibition on getting high on alcohol or drugs prior to a dive.

The gutted law that remains establishes standards for diver certification, standards for instructor certification, and requirements for vessels operated for-hire to divers. A copy is enclosed for your perusal.

The intent here is not to discuss in detail the content of the act or the processes by which it was amended. For that information one need only refer to Paul Tzimoulis' editorial in the November, 1975, issue of *Skin Diver* or read the February, 1975, issue for Bill Barada's account of the earlier history. We do, however, offer these conclusions about the effect of the year-long battle.

A Positive Influence

The L.A. County Ordinance and the subsequent battle and amendment combine as the single most positive nation-wide influence on scuba diving since

Believe it or not, you won in Los Angeles

Jacques Costeau got his first breath of air after nine months in the water.

At long last, the certifying organizations have had to sit down together at the bargaining table to solve a major mutual problem. For too long they've been engaged in unnecessary competition, but with the impending threat of government regulation they acted fast. In a noteworthy effort they formed the National Scuba Training Council to develop general standards for instructor and diver training and then to monitor that training. Students in the future, whether in Las Vegas, Los Angeles or Lasalle, will be assured a complete training program. Furthermore, if any of the certification organizations do not solve internal problems of inadequate training, the Council is committed to act. But, make no mistake. Without the strong stimulus of the L.A. act, the organizations would still be miles apart. Their progress in working together in the last year has been remarkable.

Moreover, the equipment manufacturers were put on notice that if they did not develop some important industry-wide standards, then the government would act for them. They reacted quickly. D.E.M.A., the Diving Equipment Manufacturers Association, committed themselves nationally to accept the standards posed by the original ordinance and to monitor their own industry. D.E.M.A. even took a step beyond the law and proposed additional national reforms. D.E.M.A. knows that the government means business. An Undercurrent interview with a key L.A. county executive confirmed that should the industry fail in its program of self regulation, then that quality control law will be right back on the books. No one believes that the manufacturers will go back on their agreement and so far they have demonstrated good faith. It is obvious, however, that the manufacturers' positive action came about only because of government action.

Although the charter boat operators were the most

vocal opponents of the new law, they agreed to comply voluntarily with the sections which were struck. Several of the less respected charters have gone out of business since the law passed.

A Rationale for Regulation

By repealing those sections which regulated the individual diver, the government has acknowledged that it should direct its attention only to those organizations or individuals with an economic stake in diving. The stringent recertification requirements are gone. The county will watch the industry, not the individual sport diver.

Regardless of the outcry from the diving community, *the case had been made for at least partial government regulation of the industry.* The abuses were too obvious. In return, however, the industry can take most of the credit for reducing the scope of the law. While hundreds of divers wrote to oppose the law, a sizeable number of diver's parents and divers themselves wrote to support it. Divers were deeply concerned about problems they had encountered and were equally concerned about the average of 10 deaths a year in Los Angeles County and roughly thirty a year in California. The industry, which had been hurt financially by both the recession and, to an indeterminable degree, by the dive law, organized to repeal the legislation. This is not to say they had been unconcerned with the safety of divers; safety had always been a major concern. Yet, their weakened financial position became the impetus for organization and action.

One need only to read the report presented to the Board of Supervisors by Jon Hardy, NAUI General Manager, and 13 other key industry figures, to derive this conclusion. The report nicely outlines how the dive industry will organize and act to increase diver safety. However, the dominant theme is that the financial status of the entire industry has been seriously threatened and unless the law is repealed, the diving industry will suffer irreparable financial damage. That is the lead argument. It receives top priority.

One must understand, however, that the dive industry performed as has every other industry when confronted with strong government regulatory action. In political disputes the prevailing interest is and will continue to be an economic interest. That is a fact of the American economic and political system. The dive industry performed effectively because its livelihood had been seriously challenged. The government knows that if it is to get positive action from any industry—automotive, drugs or diving—it must point its scalpel at the economic jugular.

The Impossibility of Enforcement

A couple of reasons for the repeal must be kept in mind should future battles develop. A major reason the law passed initially was that the county hoped

that other jurisdictions, particularly the state, would pass similar legislation. It never happened, partially because the diving industry lobbied effectively to prevent it. No federal action, either administrative or congressional, is pending.

The ordinance also turned out to be unenforceable. Because of the crazy quilt of governments in Los Angeles county, the law only applied to unincorporated areas, which included only four dive shops, and did not include the City of Los Angeles.

Just as significant, in the tradition of the civil rights activists of the 60's and the anti-war demonstrators of the 70's, the divers themselves exercised a mild form of civil disobedience. They refused to get recertified. Only 2500 of the more than 100,000 L.A. County divers were recertified. Without voluntary compliance, the law was unenforceable.

More Political Sophistication Required

The dive industry and diving public lack the political sophistication it must develop if it is to turn back other legislative efforts or to become an effective lobbying force. The community's initial reaction was highly defensive, generally ineffective, and even seemed somewhat silly. There were claims that the government was about to take over the diving industry in entirety. That free enterprise must prevail. That the entire ordinance was unconstitutional because leisure time could not be subjected to government regulation. That the whole tribe of county executives were bumbling bureaucrats. That the government had no right to intervene in any sport. That unless the entire law were repealed the industry would no longer cooperate. That the industry had the right to regulate itself.

In 1975, such simplistic arguments are not effective. They did nothing to increase government confidence in the competency of the dive community and in fact diverted attention from the substantial arguments available to the community. The diving community's knee-jerk reaction was just as severe as the reaction of the county decision-makers to the initial journalistic exploits by the Los Angeles Times which led to the law. When the diving community got down to fact and reason, it was heard. But not before. In the future, only diplomacy and sensible strategy will bring victory.

Problems Remain

Problems continue to exist within the industry and to solve them it will take an active effort from the new coalition and continued cooperation with the government. For example, just a short time after the section establishing standards for air was repealed, the state found that a very popular dive shop in the Los Angeles area was filling tanks from a poorly maintained compressor and pumping air with far-too-high a carbon monoxide content. Alert divers who had taken a swig complained, and the state

inspected. They found enough to close down the shop, but decided to work with the shop to get the compressor back to safe air production.

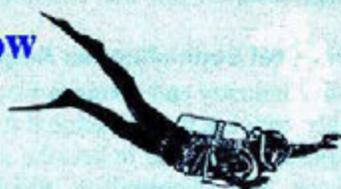
Everyone Wins

Finally, we must conclude that the final result shows that everyone has won. The manufacturers are without government regulation, but they are under the arbalete to ensure high standards in their products and some standard design to improve safety. Diver and instructor standards remain in the law, but the association standards now meet or exceed those

legislated. Out of the conflict has risen a new association of certifying organizations capable of ensuring first rate nation-wide training.

The biggest winner of them all is the individual diver. There's been a lot of rhetoric about the evils of the ordinance, but there should be no doubt that individual divers everywhere are far better off because L.A. county had the courage to charge into a void created by the industry itself and then step out gracefully when the industry finally demonstrated the organization and perseverance to solve their self-created problems. For all, it's a jolly good show.

Free Flow



We couldn't find Stanley at the Chatham Beach Hotel in Montego Bay, but Undercurrent reader Suzanne Bachrach of Gaithersburg, Md., tracked him down and reports he is an extremely competent diver and a very considerate one, but like a few others he didn't seem to be too interested in C-cards . . . When we think of the concern for safety in the U.S. and Canada, diving in other countries is positively pre-Cousteauvian . . . What happened to Undercurrent last month? A switch from first class to second class rates (only for publications) nearly embolized the whole operation. S'posed to be 4 day delivery, but we lost 4 weeks. We'll be catching up . . .

Fred Calhoun, a NAUI honcho in Boston, thinks we missed the point on the At-Pac recall article. Fred finds four types of gear: "equipment we need which is well made (some regulators); equipment we need which is *not* well made (most safety vests); equipment we *don't* need which is well made (not a large category); and equipment we *don't* need which is *not* well made (At-Pacs, tank liners, etc.)" . . . Oswald Henderson from Salisbury, Md., wrote that he wasn't too happy with his recent vacation to the Holiday Isle Resort in the Florida Keys. Besides a dirty room, poor service, and no record of his registration and deposit, his room was ripped off on his last day in town.

Stay with the standard plastic dust cap to keep your first stage dry; that fun little rubber ball made

by Scubapro seems like a good deal, but we've just failed to get it centered properly one too many times . . . Those corny old high-voiced "help shark" jokes you told behind the garage when you were a kid were just so much malarkey; shark expert H. David Baldrige's study shows that only 2% of the injuries in shark attacks were in the groin area, if you know what we mean, and the bets are that you do . . .

If you haven't heard John Denver sing *Aye Calypso* tune in the top 40; it's that song that'll make you believe you're standing on a tropical dock, mug hoisted on high, singing in harmony with a chorus of forty, while the Calypso crew, dressed in bell bottoms and striped t-shirts, dance together in great spirit (save for the guy in the red knit cap) as they sail off into the Caribbean sunset. Hollywood, here we come . . . Get more than one Undercurrent subscription solicitation in the mail? As a diver you're on more than one mailing list and since it's so veery veery expensive to sort out your name kindly pass the subscription form on if you will. Tanks a lot . . .

Sure hear some nice things about the Spanish Bay Reef Resort on Grand Cayman; divers love the dives, the food, *and* the owners, Nancy and Ron Sefton . . . Also hear good things about the Farafin, Farallons new design. Beach divers claim more power and less fatigue kicking out for long trips . . .

Big Underwater Exposition at Miami's Dinner Key Auditorium on December 5, 6, and 7.

Explorer's Unlimited out of Los Angeles sent a list of horrors out of Spyglass Hill on Roatan that'd make your regulator freeze: Arthur D. Sams says they were promised a dive boat, night dives, running water, hot water, and a roasted pig luau, but instead they got headaches and nausea from the bad air, and all but 7 of the 42 divers on the tour became ill from the food and water. None of the promises materialized, attested to by 20 divers on the trip who signed the letter.

Correspondents located strategically in the major diving areas of the world as well as on all coasts and major inland waters of the continental U.S.

The editors welcome comments, suggestions and manuscripts from the readers of Undercurrent.

ORDINANCE NO. 11,215

An Ordinance amending Ordinance No. 11025, entitled the "County Scuba Diving Ordinance" adopted October 22, 1974, as amended by Ordinance 11037, adopted November 21, 1974; and declaring the urgency thereof and that this Ordinance shall take immediate effect.

The Board of Supervisors of the County of Los Angeles do ordain as follows:

Section 1: Ordinance No. 11025, entitled the "County Scuba Diving Ordinance" adopted October 22, 1974, as amended by Ordinance No. 11037 on November 21, 1974, is amended in its entirety so as to read as follows:

ARTICLE I

General Provisions

Sec. 1. **Short Title.** This Ordinance shall be known and may be cited as the "County Scuba Diving Ordinance."

Sec. 2. **Applicability.** The provisions of this Ordinance and any rules and regulations adopted pursuant thereto shall be applicable to and within the unincorporated territory of the County of Los Angeles.

Sec. 3. **Severability.** If any provision of this Ordinance or the application thereof to any person or circumstance is held invalid, the remainder of this Ordinance, and the applicability of such provisions to other persons or circumstances shall not be affected thereby.

Sec. 4. **Violations.** Violation of this Ordinance is a misdemeanor punishable by a fine of not more than FIVE HUNDRED DOLLARS (\$500.00) or by imprisonment in the County Jail for not more than six (6) months or by both such fine and imprisonment. A repetition or continuation of any violation of any provision of this Ordinance on successive days constitutes a separate offense for each day during any portion of which such violation is committed, continued, or permitted.

Sec. 5. **Construction of Gender.** The masculine gender includes the feminine.

ARTICLE II

Prohibitions

Sec. 101. **Diver Credentials.** A person shall not issue a credential certifying that the recipient thereof has satisfactorily completed a course of scuba diving training unless the training has met the specifications of Article IV of this Ordinance.

Sec. 102. **Instructor Credentials.** A person shall not issue a credential certifying that the recipient thereof has satisfactorily completed training in the instruction of scuba diving unless the training has met the specifications of Article V of this Ordinance.

Sec. 103. **Training.** A person shall not conduct any training in basic scuba diving or in instructor certification unless said person has fulfilled the requirements of Article V of this Ordinance and possesses an active credential.

Sec. 104. **Vessels Used for Scuba Diving in Open Water.** A person shall not operate a vessel for hire as a base of operation for scuba diving unless the vessel is operated and equipped in the manner specified by Article VI of this Ordinance and the operator has submitted a letter of compliance to the Director.

ARTICLE III

Definitions

Sec. 201. **Director:** Shall mean Director of Parks and Recreation of the County of Los Angeles.

Sec. 202. **Open Water:** Shall mean any body of water other than a swimming pool.

Sec. 203. **Scuba Diving:** Shall mean diving with a self-contained underwater breathing apparatus.

Sec. 204. **Credential:** Shall mean any certification card, identification card, license, diploma, or letter.

ARTICLE IV

Requirements for Certification as a Scuba Diver

Sec. 301. **Qualifications.** The diver shall participate in a scuba diving course by having satisfied the following requirements:

(a) Demonstrated the ability to swim continuously for 200 yards without swimming aids; swim 50 feet underwater without swimming aids; swim 50 yards towing another person without swimming aids; float and/or tread water with minimal movement for 10 minutes; and tread water with legs only for 20 seconds.

(b) Fulfillment of swimming requirements in accordance with Sec. 301 (a) is recommended prior to enrollment in a scuba diving course and mandatory prior to commencement of scuba training in the open water in said course.

Sec. 302. **Classroom and Water Training.** The diver shall have received and satisfactorily completed eighteen (18) hours of combined classroom and water training. This water training may be conducted in a pool or other water which is confined or protected. The ratio of students to instructor during this water training shall not have exceeded 12 to 1. The training shall have consisted of the following:

(a) Instruction from a certified instructor of scuba diving on the use, preventive maintenance, and care of scuba diving equipment; laws of physics relating to scuba diving; physiology with emphasis on the lungs, circulatory system, ears, and sinuses; medical-psychological problems related to scuba diving resulting from effects of pressure, breathing compressed air, carbon dioxide build-up, hyper-ventilation, physical fitness, exposure, temperature, and carotid sinus reflex; marine hazards; orientation to first aid, mouth-to-mouth and cardiopulmonary resuscitation; Navy Decompression Tables and repetitive diving; recommended diving practices including the buddy system, communications, diver's logbook, emergency procedures, accident reporting, dive plan, procedures for surface and boat, and nutrition, ecology, oceanography, laws or ordinances associated with the sport; and information sources for continuing education in scuba diving.

(b) Practice in water with a certified instructor of scuba diving in the use of mask, fins, and snorkel; use of personal flotation devices; surface dives; water entries; use of weight belts; use of scuba diving equipment under normal and emergency diving conditions; and buddy breathing.

Sec. 303. **Open Water Training.** The diver shall have received and satisfactorily completed nine (9) hours of open water training with a certified instructor of scuba diving. No more than six (6) hours of open water training shall have been received during any one day. This training shall have been received where the ratio of students to instructor did not exceed 8 to 1 when using scuba diving equipment nor 12 to 1 when using skin diving equipment. The training shall have consisted of practice entries and exits from shore or boat or both, with and without scuba diving equipment; use of mask, fins, and snorkel; descent and ascent with and without scuba diving equipment; buoyancy control on and beneath the surface; swimming beneath the water with and without scuba equipment, in and around aquatic plants, clearing the mask and regulator; activating, where applicable, a reserve mechanism; monitoring a

submersible pressure gauge; buddy breathing; emergency swimming ascent; buddy teamwork; swimming in surf or rough water with and without scuba equipment; and use of the safety whistle.

Sec. 304. **Dives to Be Performed During Open Water Training.** The diver shall have made, and satisfactorily completed one skin dive from shore, which shall have included surf or rough water training in the presence of a certified instructor of scuba diving. The diver shall also have made and satisfactorily completed two dives with scuba equipment, one of which shall be from shore, and one of which may be from shore or a vessel, in the presence of a certified instructor of scuba diving. Credit for no more than two (2) scuba dives shall be given within any one day.

Sec. 305. **Completion of Written Examination.** The diver shall have taken a written examination on scuba diving and received a grade of no less than 70%, which shall reflect thorough understanding of diving physics, diving physiology, and diving emergency procedures.

Sec. 306. **Completion of Performance Examination.** The diver shall transport himself and his gear 400 yards in water.

Sec. 307. **Physically Handicapped Divers.** If an individual cannot comply with the requirements of Section 301 (a) due to a physical handicap, the requirements may be waived if the individual can demonstrate sufficient watermanship to the satisfaction of a certified instructor of scuba diving.

ARTICLE V

Requirements for Certification As Instructor of Scuba Diving

Sec. 401. **Qualifications.** The instructor shall have qualified for certification in a course of instruction on the teaching of scuba diving that provides the training and testing specified by Sections 402 and 403 of this Ordinance by having satisfied the following requirements:

(a) Possess current training in first aid, life saving, cardio-pulmonary resuscitation, and current scuba certification.

(b) Found to be physically fit to scuba dive by a physician whose opinion is based upon a physical examination of the diver that has included an examination of the diver's ears and sinuses, respiratory system, and cardiovascular system.

(c) Demonstrated the ability to swim three hundred (300) yards, demonstrating at least two strokes in good form; be able to demonstrate 10-minute surface survival techniques; back floating; treading water, bobbing/drownproofing (survival floating); swim twenty-five (25) yards under water with one breath and no push-off; scuba dive in open water; use and perform preventive maintenance on scuba diving equipment; and use recognized safety procedures associated with scuba diving.

Sec. 402. **Training.** The instructor shall have received and satisfactorily completed a total of 100 hours of training from a recognized certifying organization during which the following instructions shall have been received by both lecture and practical work, including water work, watermanship in pool and open water classroom teaching; presentations; practical teaching presentation; teaching theory, methods, techniques, evaluation, and aids; diving environment; diving equipment; medical aspects of scuba diving; decompression and repetitive diving; diving physics; scuba diving course operations and procedures; emergency procedures and openwater

diving; diving physiology; diving physical fitness; diving first aid; diving life saving; legal aspects of diving instruction, advanced and specialty diving orientation concerning subjects such as, but not necessarily limited to, skin diving, underwater navigation, deep diving, and air consumption; and a written examination of the training received.

Sec. 403. **Completion of Written Examination.** The instructor shall have taken and satisfactorily passed written examinations covering the instruction received. The content of the written examination shall have been prepared by a recognized certifying organization and the determination of satisfactory completion shall be made by or under the supervision of a certified instructor of scuba diving.

ARTICLE VI

Requirements For Vessels Operated For Hire As A Base of Operations For Scuba Diving

Sec. 501. **Required Emergency Equipment.** The vessel shall be equipped with emergency equipment including an oxygen resuscitative unit; first aid kit; flotation device for quickly reaching and aiding a distressed diver; a recall system capable of being heard or seen by scuba divers under and on the surface of the water; and a marker buoy.

Sec. 502. **Trained Operator For Emergency Equipment.** The vessel shall carry personnel trained in the use of the emergency equipment described in Section 501.

Section 2: **Declaration of Urgency.** Due to the continuing participation in scuba diving on the part of citizens of the County of Los Angeles and the continuing use of the territorial waters of the County of Los Angeles for scuba diving, it is imperative that the public health and safety be immediately protected by the establishment of mandatory standards designed to make scuba diving safe. This Ordinance establishes such standards. By reason of the foregoing facts, this Ordinance is urgently required for the immediate preservation of the public peace, health and safety, and the same shall take effect immediately upon the passage thereof.

Section 3. This ordinance shall be published in the Metropolitan News a newspaper printed and published in the County of Los Angeles.

(SEAL) JAMES A HAYES
Chairman

ATTEST:
JAMES S MIZE
Executive Officer-Clerk of the Board of Supervisors of the County of Los Angeles

I hereby certify that at its meeting of September 16, 1975, the foregoing ordinance was adopted by the Board of Supervisors of said County of Los Angeles by the following vote, to-wit:

Ayes: Supervisors Peter F. Schabarum, Edmund D. Edelman, Baxter Ward and James A. Hayes.
Noes: None

(SEAL) JAMES S MIZE
Executive Officer-Clerk of the Board of Supervisors of the County of Los Angeles

Effective date September 16, 1975

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